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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,922	03/15/2001	Bernhard Deck	004501-540	2900

21839 7590 03/25/2005

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
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EXAMINER

TANG, KAREN C

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,922

Applicant(s)

DECK ET AL.

Examiner

Karen C Tang

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/5/04 & 5/22/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1-5, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazur U.S Patent 6,600,758 in view of Raaf.

1. Claims 1-5, 8, 10 and 11 specify that a method/system that contain a timebase unit that is connected to other two units via a deterministic communications network. The claims state that the timebase unit transmits protocol packets via the deterministic communication network at defined time interval. The other units receive the protocol packets and use the defined interval for synchronization. The Mazur reference discloses in figure 1 a communication between a base station and a mobile units by allocating timeslots to connections. Figure 4 shows the base station can transmit control information on time slots. Since the mobile units receive information in time slots, they are inherently synchronized with the time slots.

Mazur does not disclose the transmission of packets in time slots.

Raaf reference discloses in figure 1 that the packets transmit in define time interval (Col7, Line1).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use packets for communication between the base station and the mobile units of Mazur, as suggested by Raaf, the motivation being that packet communication provide flexibility such as multicasting and broadcasting.

2. Claims 2 – 5 specify selected values for the claimed time interval. However, while Mazur does not disclose particular value for the time slots, it would have been obvious to one of ordinary skill in the art to select any values for the time slots as a matter of design choice.

3. Regarding claim 10, Mazur 's communication technique is applied in a cellular network environment instead of a fieldbus or DOL network. But it would have been obvious to one of ordinary skill in the art to apply Mazur's technique into any communication network type including bus and DOL networks since these type of networks are well known in the art, in addition, a DOL network provides higher capacity.

4. Regarding claim 11, Mazur's communication technique is applied in a cellular network system instead of a switchgear assembly or an automation system. It would have been obvious to one of ordinary skill in the art to apply Mazur's technique in any system with any type of system.

Art Unit: 2151

II. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazur in view of Raaf, as applied to claim 1 and 8 above, and further in view of Kingdon.

1. Claims 6 and 9 state the base unit relies on GPS to define the time reference, and includes a GPS receiver. Mazur and Raaf do not disclose this feature.

Kingdon reference discloses in Figure 2, 3 and 4 that the GPS technology is being used as a reference clock signal. The reference also specifies the base station have a respective GPS receiver.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the implementation of Kingdon in the base station of Mazur because GPS technology provide an accurate time reference.

2. Claim 7 specify the protocol packets contain information about the local time.

However, Kingdon reference discloses the protocol packets contain synchronized information. Kingdon suggests time synchronization. It would have been obvious to one of ordinary skill in the art include local time synchronization of all mobile units of Mazur as suggested by Kingdon since this would allow for a simple way of providing an accurate time to all units.

Response to Arguments

III. Applicant's arguments filed 02/07/2005 have been fully considered but they are not persuasive.

1) In the remark, the applicant argued that (1) Mazur and Raaf failed to disclose time interval between signals to clock or synchronize units. (2) Failed to suggest a method for time synchronization of units in a system which has a timebase unit which is connected via a deterministic communications network to the units. (3) Failed to suggest the time base unit transmitting protocol packets via the deterministic communications network to the unit at a defined time interval between the received protocol packets for at least approximately identical clocking of the units. (4) Kingdon failed to overcome the deficiencies of Mazur and Raaf.

2) Examiner respectfully traverse the arguments:

As to the point (1) Mazur and Raaf discloses synchronize units: two base units (refer to Fig 1 and Col 7, Lines 50-67) and the units are time synchronized with each other.

Each time synchronized units consists time interval: time slot (refer to Fig 4) which is being used to synchronized between two synchronized units.

(2) Mazur also discloses the two base station transmit control information to synchronized itself and neighbor base station by using time slot (refer to Fig 1 and title). Mazur also discusses the time synchronized units are connected via deterministic communication network to the units. (Notice how in Fig 1 and Fig 8, that the entire

Art Unit: 2151

Haves is within a network and consists of multiple base units/synchronized units – the entire Haves is a communication network.) (3) Mazur discloses the approximate clocking (propagation delay differences) of the units (base stations) is by synchronization burst/packet transferring. (Refer to Col 10, Lines 35-60).

(4) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Kingdom discloses the GPS technology is being utilized as a reference clock signal (refer to Fig 2, 3, and 4). Kingdom also discloses the base station have a respective GPS receiver. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Mazur, Raaf and Kingdom. The suggestion/ motivation for doing so would have been that GPS provides a better clocking signal so can reduce the time delay when synchronize all the synchronize time units (base stations) within the network.

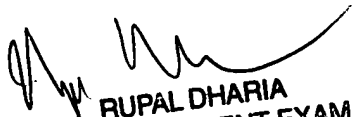
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571)272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KT


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER